LITERATURE SURVEY

1. Title: CricAI: A classification based tool to predict the outcome in ODI cricket

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The research paper uses the dataset of all the ODI Matches played since 1971 (the year ODI was introduced) till date from the website www.cricinfo.com [4].

The factors being considered for analysis include:
- *Home Game Advantage:* This refers to whether the game is played on home grounds or in a different country.
- *Day / Night Effect:* This factor considers the effect of whether the match is played during the daytime or at night.
- *Winning the Toss:* A coin is tossed at the beginning of the game and the captain of the team that wins the toss decides which team should bat first. This factor refers to whether the team wins the toss.

 Batting First: This factor determines whether the concerned team batted first (or bowled first) in the given match.

Data set Collection :
Data is collected in ARFF format since WEKA tool is used for analysis.

Choice Of Machine Learning Techniques:
The dataset is analyzed using various classification algorithms like naïve Bayes, Decision Trees, AdaBoost, and Bagging.

Classification Results:

Comparison of different classification techniques was performed using Receiver Operator Curve (ROC) and Root Mean Squared Error (RMSE). Better learning techniques produce highest ROC and lowest RMSE. This is produced by Naïve Bayes classifier.

For every factor described, the tables of probabilities are generated.

Implementation Of CricAI tool:

After all the probability tables are generated the tool is implemented using Java and MySQL which stores the database required for the analysis of cricket matches.